

REMARKS

Claims 1, 3-14, 17-20, 22-27, and 34 were pending in the present application. Claim 3 has been cancelled. Accordingly, claims 1, 4-14, 17-20, 22-27, and 34 are now pending in the application.

Claim 3 is objected to for typographic errors and for being of improper dependent form for not further limiting the previous claims. Applicant has cancelled claim 3 and believes the rejection to now be moot.

Claims 1, 3-14, 17-20, 22-27, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gharachorloo, et al. (U.S. Patent Application Publication Number 2002/0124144) (hereinafter “Gharachorloo”) in view of Singhal, et al. (U.S. Patent Number 5,978,874) (hereinafter “Singhal”), and in further view of Van Doren et al. (U.S. Patent No. 6,209,065) (hereinafter “Van Doren”). Applicant respectfully traverses this rejection.

The Examiner acknowledges now and in the previous Office action dated March 7, 2007, that neither Singhal nor Gharachorloo teach or suggest “wherein the interface in the node is configured to delay providing the data packet on the data network until the interface receives an indication that shared copies of the coherency unit in the additional node have been invalidated” as recited in Applicant’s claim 1. However, the Examiner asserts Van Doren teaches the limitation at col. 19, lines 6-21.

Applicant submits that Van Doren discloses at col. 19, lines 33-55

“In accordance with the invention, however, the RdMod issued by P1 of node 1402 is sent to the home directory 1415 of node 1406 and the home ordering point 1425 of node 1406 generates a commit-signal and probes, as described above. Some of the generated probes are directed to processors that are local to that node (e.g., P5 and P6); other probes are directed to processors (e.g., P9, P13 and P16) on other remote nodes (e.g., nodes 1410 and 1414). These remote probes are sent over the hierarchical switch 1450 where they are atomically multicasted and totally ordered as described herein.

Significantly, the home ordering point 1425 sends probes to the entities in parallel with the commit signal; the probes directed to the processors on the remote nodes are enqueued at the input queues of the nodes and the commit-signal is enqueued at an input queue of node 1. P1 does not have to wait for the remote probes to be delivered and acknowledged; there may be other commands stored in the input queues of the remote nodes and these packets are processed by the local switch and processors of those nodes at their own speeds. P1 has "committed" once it has received the commit-signal even if the probes are stalled in the input queues of the remote processors.

Clearly, the reduction in latency is an advantage of the novel commit-signal mechanism that is apparent with the large SMP system. The latencies of the various paths to the remote nodes are typically different; some nodes may be busier than others, but in the prior art, the requesting processor must wait for the longest one. Also, the novel commit-signal technique results in propagation of less commands through the system and a reduction in resources. This is because there is no need for acknowledgments to be sent back from the remote processors and no counters to keep track of the acknowledgments." (Emphasis added)

From the foregoing, Applicant submits Van Doren is teaching away from using a system that delays sending data. Van Doren is clearly stating that waiting for acknowledgements is not advantageous, since using the commit signal is advantageous to reduce latency. Thus, Applicant submits the Examiner has not provided a *prima facie* case of obviousness under the Graham factual inquiries. Applicant submits since Van Doren teaches away from the Applicant's recited limitations, it not be obvious to one of ordinary skill and that one of ordinary skill would not be motivated to combine the references as the Examiner suggests.

Thus, Applicant submits claim 1, along with its dependent claims patentably distinguishes over the cited references for the reasons given above.

Applicant's claims 19, and 34 recite features that are similar to the features recited in claim 1. Accordingly, for at least the reasons given above, Applicant submits claims 19 and 34, along with their respective dependent claims patentably distinguish over the cited references.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any fees are due, the Commissioner is authorized to charge said fees to
Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-
00201/SJC.

Respectfully submitted,

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